

Title (en)  
DEVELOPMENT OF AN ALUMINUM HYDROXYCARBOXYLATE BUILDER

Title (de)  
ENTWICKLUNG EINES ALUMINIUM-HYDROXYCARBOXYLAT-BAUSTOFFS

Title (fr)  
MISE AU POINT D'UN ADJUVANT À BASE D'HYDROXYCARBOXYLATE D'ALUMINIUM

Publication  
**EP 3399014 A1 20181107 (EN)**

Application  
**EP 18172284 A 20100129**

Priority  
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• EP 10735557 A 20100129  
• IB 2010050419 W 20100129

Abstract (en)  
A cleaning composition for removing soils includes an aluminum salt, a hydroxycarboxylate, an alkalinity source and optionally, a surfactant system. The cleaning composition has a pH of between about 9 and about 14.

IPC 8 full level  
**C11D 3/04** (2006.01); **C11D 3/20** (2006.01); **C11D 7/02** (2006.01); **C11D 7/10** (2006.01); **C11D 7/26** (2006.01); **C11D 7/60** (2006.01)

CPC (source: EP US)  
**C11D 3/044** (2013.01 - EP US); **C11D 3/046** (2013.01 - EP US); **C11D 3/2086** (2013.01 - EP US); **C11D 7/06** (2013.01 - EP US); **C11D 7/10** (2013.01 - EP US); **C11D 7/265** (2013.01 - EP US)

Citation (applicant)  
• US 4618914 A 19861021 - SATO ATSUSHI [JP], et al  
• US 4830773 A 19890516 - OLSON KEITH E [US]  
• US 3048548 A 19620807 - MARTIN ARTHUR T, et al  
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• KIRK-OTHEMER: "Encyclopedia of Chemical Technology", vol. 8, pages: 900 - 912  
• M. ZAHRADNIK: "The Production and Application of Fluorescent Brightening Agents", 1982, JOHN WILEY & SONS

Citation (search report)  
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DOCDB simple family (publication)  
**WO 2010086832 A2 20100805; WO 2010086832 A3 20101209**; AU 2010209328 A1 20110901; AU 2010209328 B2 20150702; BR PI1006847 A2 20171107; BR PI1006847 B1 20191126; CA 2748533 A1 20100805; CA 2748533 C 20161011; CN 102292428 A 20111221; CN 102292428 B 20140604; EP 2384361 A2 20111109; EP 2384361 A4 20140730; EP 2384361 B1 20180530; EP 3399014 A1 20181107; EP 3399014 B1 20200226; JP 2012516373 A 20120719; JP 5702307 B2 20150415; MX 2011007324 A 20110812; US 2010197558 A1 20100805; US 8153573 B2 20120410

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